

Equity in the Delivery of Health Care in Taiwan

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**Table 1A Distribution of Personal Total Health Care Utilization
Ranked by Equivalent Income Decile**

Unit: NT\$, %

Equivalent Income Decile	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
1	14577.56	10.30	1199.65	13.3124	14210.48	9.79	1283.55	12.8332	14880.51	9.87	1336.83	12.5153
2	14384.12	10.17	1090.16	14.0478	14948.72	10.30	1332.64	13.5464	15381.69	10.21	1380.75	13.2029
3	13626.5	9.63	1076.99	13.6745	14142.2	9.74	1310.38	13.4272	14711.50	9.76	1333.65	13.0625
4	13031.64	9.21	1073.64	13.4428	13259.24	9.13	1275.1	13.2021	13989.14	9.28	1318.56	12.7252
5	12455.69	8.80	1074.86	13.9604	12766.53	8.79	1281.36	13.447	13225.69	8.77	1298.73	12.9048
6	12603.64	8.91	1093.00	13.9824	13017.23	8.97	1329.42	13.5262	13577.65	9.01	1354.16	12.9846
7	14176.27	10.02	1230.71	14.5456	14510.48	9.99	1452.52	14.7584	15184.05	10.07	1482.03	14.1994
8	14511.64	10.26	1214.95	15.4018	15357.2	10.58	1491.25	14.7868	15955.63	10.59	1534.63	14.4187
9	15562.59	11.00	1255.77	16.0816	15737.67	10.84	1537.95	14.9514	16103.72	10.68	1579.98	14.5642
10	16566.6	11.71	1343.05	16.1359	17233.77	11.87	1648.23	14.7108	17712.77	11.75	1680.06	14.4932
Average	14149.6	100.00	1165.278	14.4585	14518.35	100.00	1394.24	13.91895	15072.24	100.00	1429.94	13.5071
Concentration Index		0.024188				0.02946				0.026973		

**Table 2A Distribution of Personal Total Health Care Utilization
Classified by Family Size**

Unit: NT\$, %

Family Size	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
1	12440.39	12.98	884.56	10.6929	12232.28	12.44	1073.21	10.5123	13298.89	13.03	1151.68	10.7375
2	20903.98	22.88	1582.89	17.2028	22248.25	23.74	1887.85	16.4439	23365.01	24.01	1972.51	16.3858
3	14961.07	15.43	1207.71	14.8257	15474.48	15.55	1486.03	14.4923	16087.67	15.57	1529.88	14.2201
4	11533.95	17.30	1071.30	14.3366	11733.66	17.15	1248.18	13.8047	11779.41	16.59	1248.79	13.0737
5	11842.07	15.31	1058.43	14.0869	11965.17	15.07	1255.39	13.4511	12307.88	14.94	1267.79	12.7403
6	14166.99	9.30	1197.82	15.2187	14475.84	9.26	1449.39	14.5342	15081.17	9.29	1468.53	13.8917
7	15164.96	4.18	1268.76	15.7869	15720.64	4.22	1528.36	14.9942	15645.10	4.05	1528.83	14.2002
8	15116.19	2.63	1287.35	16.4443	15160.52	2.57	1540.47	15.5043	15497.77	2.53	1557.08	14.6650
Average	14149.62	100	1165.28	14.4585	14518.35	100	1394.24	13.9189	15072.23	100	1429.94	13.5071

**Table 3A Distribution of Personal Total Health Care Utilization
Ranked by Age Decile**

Unit: NT\$, %

Age Decile	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
1	11121.93	8.43	1371.54	20.6217	10141.65	7.48	1441.87	20.5291	9147.34	6.50	1286.66	17.7886
2	5581.07	3.84	647.05	10.6810	5485.86	3.67	712.54	9.8345	5320.60	3.43	658.30	8.6872
3	5775.53	4.23	576.91	8.3959	6162.00	4.40	692.89	8.3755	6704.83	4.61	745.19	8.4046
4	7179.49	4.38	649.75	9.0546	7290.51	4.33	769.34	9.0822	8118.22	4.64	863.31	9.4759
5	8794.76	6.47	746.41	10.5300	8920.80	6.39	900.99	10.4444	8946.18	6.17	941.91	10.3555
6	9504.82	6.95	846.62	11.6039	9687.46	6.90	1028.15	11.2026	9912.46	6.80	1064.21	10.9955
7	10895.03	7.35	952.06	12.3415	11482.22	7.54	1200.65	11.9302	12437.80	7.87	1265.34	11.8160
8	14814.74	10.93	1240.26	14.4069	15524.91	11.16	1535.73	13.8949	16731.04	11.58	1655.47	13.9942
9	24873.74	17.58	1993.37	19.7262	26193.35	18.03	2392.57	18.7097	22709.37	15.05	2543.20	18.9497
10	42702.32	29.87	2572.76	26.2886	44187.02	30.10	3191.84	24.3590	45773.82	30.03	3200.58	23.9183
Average	14141.63	100.00	1164.56	14.4433	14517.73	100.00	1391.27	13.9159	15073.98	100.00	1425.34	13.4969

Table 4A Distribution of Personal Total Health Care Utilization
Classified by Insurance Status

Unit: NT\$, %

Insurance Status	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
I	12390.89	39.95	1123.76	14.1087	12691.09	39.90	1355.69	13.7129	13049.94	39.64	1374.65	13.2047
II	14274.37	19.47	1235.27	15.4327	14605.75	19.42	1519.93	14.6110	14969.31	19.23	1555.80	14.1125
III	19008.81	21.87	1691.74	18.1301	19575.63	21.96	1930.72	17.0939	20510.83	22.23	1985.72	16.4534
IV	15365.83	0.39	1531.57	18.6164	15414.12	0.38	1682.20	18.1235	16382.20	0.39	1695.24	17.0498
V	28736.53	0.92	574.15	16.6355	26661.13	0.83	371.05	16.2277	23829.97	0.72	499.75	15.6335
VI	18224.90	17.41	979.51	14.6146	18802.66	17.51	1176.72	14.2385	19768.44	17.79	1212.06	14.1303
Average	14813.12	100	1221.59	15.1619	15192.14	100	1458.10	14.5733	15723.22	100	1489.43	14.0986

Table 5A Distribution of Personal Total Health Care Utilization
Classified by Sex

Unit: NT\$, %

Sex	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
Women	18689.46	51.74	1690.26	20.9685	18931.14	51.50	2011.55	19.9802	19686.59	50.79	2076.98	19.6183
Men	20113.68	48.26	1488.95	18.8921	20708.24	48.50	1807.38	18.1210	22089.57	49.21	1891.29	17.6781
Average	19350.78	100.00	1596.79	20.0044	19753.26	100.00	1917.10	19.1201	20800.01	100.00	1990.94	18.7193

Table 6A Distribution of Personal Total Health Care Utilization
Classified by Region

Unit: NTS, %

Region	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
North	14350.68	33.27	1446.48	13.4170	14694.67	33.24	1446.48	13.4170	15087.39	32.96	1473.76	13.1298
M-North	14063.12	12.02	1389.17	13.4122	14374.87	11.99	1389.17	13.4122	14858.10	11.97	1432.25	13.0991
Middle	14831.54	18.90	1414.99	15.8898	15723.70	19.56	1414.99	15.8898	16201.48	19.46	1511.97	15.0050
M-South	15615.96	16.26	1621.77	15.4604	15866.01	16.12	1621.77	15.4604	16723.99	16.41	1623.29	14.8995
South	15253.21	16.64	1427.25	15.4516	15380.32	16.37	1427.25	15.4516	15989.64	16.44	1414.68	15.0280
East	17182.52	2.91	1474.72	13.9892	16483.52	2.72	1474.72	13.9892	17333.76	2.76	1514.19	13.6737
Average	14817.22	100.00	1457.92	14.5419	15184.96	100.00	1457.92	14.5419	15723.48	100.00	1490.26	14.0736

**Table 7A Distribution of Personal Total Health Care Utilization
Classified by Rurality**

Unit: NT\$, %

Remote Area	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
No	16320.46	98.31	1362.25	16.8085	16719.40	98.15	1633.78	16.1979	17374.64	98.01	1678.84	15.7457
Yes	18617.25	1.69	1036.21	21.6713	18956.13	1.85	1339.39	21.3083	19011.15	1.99	1330.84	20.3404
Average	16354.49	100.00	1357.42	16.8806	16755.89	100.00	1628.98	16.2812	17404.40	100.00	1672.51	15.8293

**Table 8A Distribution of Personal Total Health Care Utilization
Classified by Catastrophic Disease**

Unit: NT\$, %

Having Catastrophic Disease	1999				2000				2001			
	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times	Expenditure	Percentage	Copayment	Times
No	13416.31	80.39	1330.56	16.5418	13601.20	79.46	1599.07	15.9551	13915.59	78.15	1641.50	15.4700
Yes	160259.94	19.61	2673.00	33.4855	163419.08	20.54	3019.36	31.4469	168483.70	21.85	3015.26	31.3924
Average	16354.49	100.00	1357.42	16.8806	16755.89	100.00	1628.98	16.2812	17404.40	100.00	1672.51	15.8293

**Table 9 The Distribution of Catastrophic Disease Incidence
Ranked by Equivalent Income Decile**

Unit: NT\$, %

Equivalent Income Decile	1999		2000		2001	
	Incidence	Percentage	Incidence	Percentage	Incidence	Percentage
1	0.025065	11.24	0.024447	10.45	0.025429	10.20
2	0.021702	10.43	0.022347	10.22	0.023682	10.13
3	0.020172	9.85	0.021498	9.95	0.021733	9.47
4	0.017691	8.68	0.018927	8.83	0.020683	8.99
5	0.015473	7.77	0.016784	8.01	0.018874	8.39
6	0.016281	8.18	0.017242	8.24	0.01906	8.48
7	0.019338	10.03	0.020777	10.25	0.022447	10.30
8	0.020565	10.81	0.022717	11.31	0.02449	11.35
9	0.021749	11.42	0.022132	11.03	0.023632	10.94
10	0.022333	11.59	0.023821	11.71	0.025672	11.73
Average	0.019996	100.00	0.021050	100.00	0.022564	100.00
Illness Concentration Index (2)		0.01934		0.028403		0.03288
Expenditure Concentration Index (1)		0.024188		0.02946		0.026973
HI = (1) - (2)		0.04848		0.001057		-0.005907

**Table 10 Cross-national Comparison of the Equity
In Health Care Delivery**

(1) ¹	Country	Italy	Netherlands	U.K.	Taiwan ²				
	HI	0.118	0.038	0.014	-0.006				
(2)	Country	Spain	Australia	U.S.	U.K.	Denmark			
	HI	2.000	0.060	0.018	0.000	-0.100			
(3)	Country	Spain	U.S.	Netherlands	U.K.	Italy	Switzerland	Denmark	Ireland
	HI	0.146	0.028	0.025	0.013	-0.036	-0.043	-0.055	-0.076

Source: Panel (1) cited from Wagstaff et al (1994); Panel (2) cited from Lairson et al (1995);

Panel (3) cited from Wagstaff and van Doorshaer (1993).

Note: 1. In Panel (1), $HI = C^{EXP} - C^{ill}$; and in Panel (2) and (3) HI is standardized concentration index of medical expenditure, using health risk factors as adjustment.

2. The HI value of Taiwan is based on the 2001 data analyzed in this study.